

Title (en)

MATERIAL FOR PLASTIC WORKING AND PRODUCTION METHOD THEREOF

Title (de)

MATERIAL FÜR PLASTISCHE VERFORMUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

MATERIAU POUR LE TRAVAIL DU PLASTIQUE ET PROCEDE DE PRODUCTION CORRESPONDANT

Publication

EP 1274528 A4 20050914 (EN)

Application

EP 02705058 A 20020228

Priority

- JP 0201858 W 20020228
- JP 2001056028 A 20010228
- US 27650201 P 20010319

Abstract (en)

[origin: US2003226652A1] A material for plastic working is produced by the steps of using a mold having a mold cavity (16) partially defined by an end surface of a stopper (13) for closing a molten metal inlet (101), teeming molten metal (10) into the mold cavity through the inlet and cooling the molten metal to thereby attain unidirectional solidification of the molten metal. Regulation of the cooling rate enables the mean grain size to be graded in the direction from the cooled face (B surface) to the opposing face (T surface) and the added components to increase in the same direction. It is possible to obtain a material for plastic working that has a selected portion exhibiting an excellent function.

IPC 1-7

B22D 27/04; **B22D 29/00**; **B21J 1/02**; **B21J 5/00**; **B21B 1/38**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] EP 0715915 A1 19960612 - SHOWA DENKO KK [JP]
- See references of WO 02068141A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

US 2003226652 A1 20031211; **US 6889746 B2 20050510**; EP 1274528 A1 20030115; EP 1274528 A4 20050914; JP 2004519332 A 20040702; WO 02068141 A1 20020906

DOCDB simple family (application)

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